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FISHERY MARKET NEWS

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FISHERY MARKET NEWS

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FISHERY MARKET NEWS

A REVIEW OF CONDITIONS AND TRENDS OF THE COMMERCIAL FISHERIES

February 1940

Washington, D. C.

Vol. 3, No. 2

SUMMARY

Special Articles

Receipts of Fishery Products at Chicago, Illinois, 1940.--A summarization of the movement of fishery products into the Chicago market during 1940 by truck, express, and freight shows that nearly sixty million pounds of fish and shellfish were received in that city--a 23 percent increase over the arrivals during the previous year.

Freezing and Cold Storage of Salmon and "Sole" Fillets.--Preliminary results of Fish and Wildlife Service investigation into the difficulties attendant in the storage of fillets of certain species of Pacific Coast fish show that adequate protection against desiccation and oxidation by means of suitable moisture-vapor proof wrappers is of extreme importance in storing fillets.

Fresh Fish

New England landings of fishery products by fishing vessels at the ports of Boston and Gloucester, Mass., and Portland, Maine, during December 1940 showed an increase of 21 percent in value to the fishermen over the same month in 1939 but a decline of 3 percent in volume. December landings amounted to 30,315,000 pounds, valued at \$979,000. Rosefish landings at the three ports in 1940 reached a record high of nearly 84,000,000 pounds, valued at more than \$1,250,000, bringing this fishery from a position of 130th to about 13th place with respect to volume.

Receipts of fresh and frozen fishery products in the Chicago Wholesale Market during December 1940 totaled 5,914,000 pounds--an increase of 1 percent as compared with arrivals the previous month.

Byproducts

Preliminary reports place the fourth quarter production of marine-animal oils during 1940 at 25 percent less than that of the last quarter of 1939. The output of sardine and menhaden oils was low.

Frozen Fish

Inventories of frozen fish and shellfish reported by public cold-storage warehouses in United States and Alaska on January 15 amounted to 86,618,000 pounds--13 percent less than the poundage in storage on the same date the previous month but 10 percent above the holdings the year previous. Freezers placed into cold storage 8,080,000 pounds of fishery products during the month ended January 15--50 percent less than the corresponding period of 1940.

Market News reports indicate that at the end of January, Boston cold-storage firms held 13,049,000 pounds of fishery products--a gain of 21 percent over the amount held on the same date in 1940; New York holdings were 8,744,000 pounds--a gain of 4 percent; and Chicago stocks were 5,350,000 pounds--a gain of 1 percent.

Canned Fish

Canned salmon remaining unsold in possession of producers at the end of 1940 amounted to less than half the inventories on hand at the end of 1939. Packers reported holding 960,000 standard cases. Canned shrimp production for the current season through February 1 reached 885,000 cases, which was 177,000 cases less than the pack during the same period of the previous season. The California canned sardine output for the season through January totaled 2,695,000 cases--a slight gain over the previous season. California tuna packers reported an all-time record production during 1940 of 4,182,000 standard cases--a gain of 22 percent. The total mackerel pack in California was placed at 1,395,000 cases during 1940, which is an increase of 38 percent over the 1939 figure.

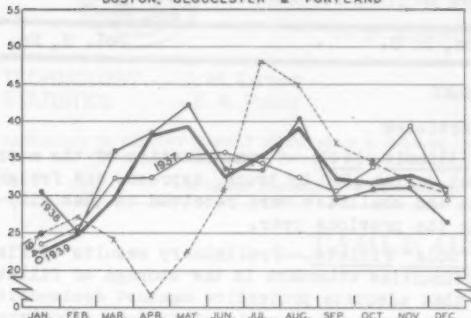
Foreign Trade

Export statistics on edible fishery products from the United States during December 1940 indicated an increase of 28 percent in this trade as compared with December 1939, while imports increased 2 percent during the same period.

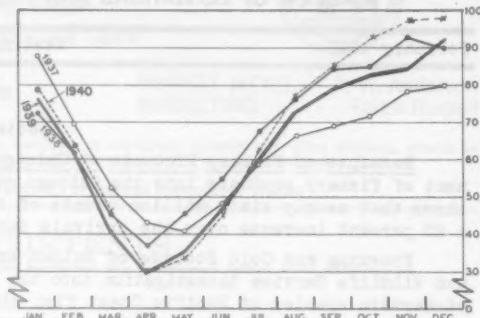
TRENDS OF FISHERY TRADE

In millions of pounds

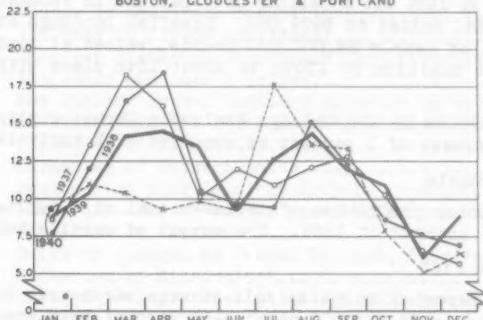
VESSEL LANDINGS, ALL FRESH FISH
BOSTON, GLOUCESTER & PORTLAND



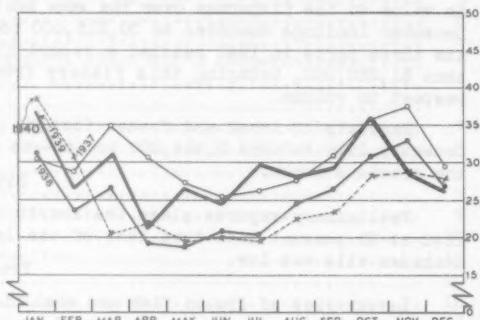
DOMESTIC COLD-STORAGE HOLDINGS OF FROZEN FISH



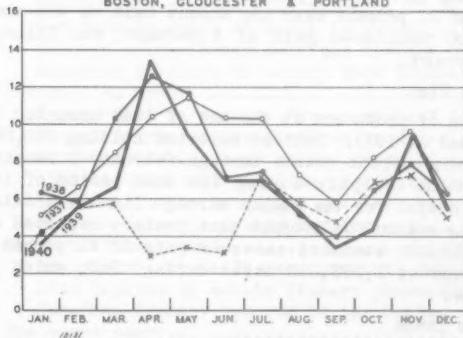
VESSEL LANDINGS, FRESH HADDOCK
BOSTON, GLOUCESTER & PORTLAND



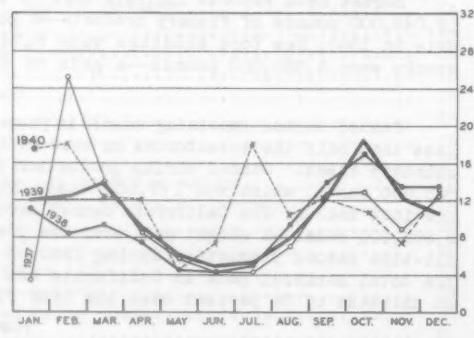
IMPORTS OF EDIBLE FISHERY COMMODITIES



VESSEL LANDINGS, FRESH COD
BOSTON, GLOUCESTER & PORTLAND



EXPORTS OF EDIBLE FISHERY COMMODITIES



RECEIPTS OF FISHERY PRODUCTS AT CHICAGO, ILLINOIS, 1940

By Edwin C. Hinsdale
 Assistant Fishery Marketing Specialist
 Division of Fishery Industries

U. S. Fish and Wildlife Service

The second annual summary issued by the Chicago Fishery Market News office of the U. S. Fish and Wildlife Service reveals a number of interesting aspects of the local fishery trade. Its 42 pages list in detail, by species, State or Province, and method of transportation, all rail arrivals as reported by express and freight terminals and truck receipts as reported by the wholesale dealers. The total of 59,433,000 pounds received during 1940 represents an increase of 23 percent when compared with 48,419,000 pounds in 1939. The magnitude of the receipts may be better understood when computed in terms of carload lots. It is interesting to note that the total quantity received during 1940 would fill approximately 2,950 freight cars, which, coupled end to end, would extend a distance of slightly more than 24 miles.

During 1940, receipts of fresh-water varieties continued to predominate, increasing 18 percent over the 1939 volume, and amounted to 31,745,000 pounds or 54 percent of the total. Salt-water species increased 30 percent to 16,200,000 pounds or 27 percent of the total. Shellfish and miscellaneous items gained 27 percent, contributing the balance of 11,488,000 pounds or 19 percent. A total of 101 classifications consisting of 38 fresh-water, 44 salt-water, and 19 shellfish and miscellaneous items made up the shipments which originated in 34 States, Alaska, and 8 Canadian Provinces.

Fresh and frozen halibut, shrimp, and lake trout were the three leading species, increasing 14, 18, and 15 percent, respectively, over 1939. Received in lesser quantities, but showing very large individual increases were frozen spiny lobster tails with an increase of 419 percent, sea scallops with 268 percent, and whiting (including frozen fillets) with 117 percent. There were but two major varieties which showed an appreciable decline during 1940--blue pike decreasing 76 percent and chubs 23 percent. Fresh and frozen sauger remained almost unchanged with an increase of less than one-half of 1 percent. Eight species accounted for 81 percent of all fresh-water receipts. They were fresh carp and the following fresh and frozen varieties: Lake herring, lake trout, sauger, smelt, whitefish, yellow perch, and yellow pike. Fresh and frozen halibut, fresh and frozen salmon, and frozen rosefish fillets accounted for 77 percent of the total salt-water receipts. Only three items--fresh and frozen shrimp, shell oysters, and shucked oysters--made up 85 percent of the total for the shellfish and miscellaneous classification, with shrimp alone accounting for 65 percent.

During 1940 fishery products arrived, without exception, by motor trucks, express, or rail freight, all of which showed appreciable gains during the year, increasing 46, 13, and 12 percent, respectively.

Receipts by Method of Transportation--1940

Classification	Lbs.	Truck		Express		Freight		Total		
		%	Trk Total	%	Trk Total	%	Trk Total	Lbs.		
All	21,295,600	100	36	18,659,242	100	31	19,477,715	100	33	59,432,557
Fresh-water	15,953,701	75	50	11,831,865	63	37	3,959,211	20	13	31,744,777
Salt-water	3,966,791	19	24	4,998,088	27	31	7,235,419	37	45	16,200,298
Shellfish, etc.	1,375,108	6	12	1,829,289	10	16	8,283,085	43	72	11,487,482
Domestic	18,574,299	87	44	12,369,080	66	29	11,258,832	58	27	42,202,211
Imported*	2,721,301	13	16	6,290,162	34	36	8,218,883	42	48	17,230,346

* Includes catch taken by U. S. vessels and shipped through Canada to the United States in bond.

Truck shipments of fresh-water varieties increased 31 percent over 1939, salt-water varieties 107 percent, and shellfish and miscellaneous items 195 percent. The latter gains were due, to a great extent, to much larger receipts of frozen fillets from Massachusetts and shrimp from Louisiana. Express shipments of fresh-water species increased 10 percent, salt-water varieties 7 percent, and shellfish and miscellaneous items 70 percent. Freight shipments of fresh-water classifications increased but 1 percent, salt-water products 23 percent, and shellfish and miscellaneous items 10 percent. Receipts of imported fish arriving by truck increased 66 percent, by express 19 percent, and by rail freight 20 percent over 1939, while domestic truck, express, and freight shipments also showed corresponding increases of 44, 10, and 7 percent, respectively.

Thirty-four States, Alaska, and eight Canadian Provinces were the sources of supply for Chicago's fishery products during 1940. Seventy-one percent of the shipments were of domestic origin while 29 percent were imported. Wisconsin, Michigan, Louisiana, Massachusetts, Minnesota, and Illinois were the leading domestic points of origin, while most imported shipments originated in British Columbia, Manitoba, and Ontario. The domestic contribution amounted to 42,202,000 pounds, an increase of 22 percent over 1939, while that of imported fish totaled 17,251,000 pounds, a gain of 25 percent. Of the imported total, 5,666,000 pounds, or 33 percent, consisting mostly of halibut and salmon, were taken by United States vessels and shipped through Canada to Chicago in bond.

Twenty-six States and seven Canadian Provinces supplied Chicago with the various fresh-water varieties. Furnishing the bulk of the fresh-water fishery products were Wisconsin, Michigan, and Manitoba, whose combined catch accounted for 64 percent and, with the addition of Minnesota and Illinois, 78 percent of the fresh-water total. Sixteen States, Alaska, and three Canadian Provinces supplied the Chicago market with salt-water species, with British Columbia (including in bond shipments) and Massachusetts together accounting for 80 percent of the salt-water receipts. With the addition of Washington, Alaska, Maine, and New York, the combined receipts of salt-water species increased to 87 percent. Twenty-six States and two Canadian Provinces were the sources for shellfish and miscellaneous items with four States--Louisiana, New York, Texas, and Virginia--producing 82 percent.

The States showing the largest increases in shipments during the year were New Jersey with 126 percent, Massachusetts 74 percent, New York 67 percent, Minnesota 46 percent, and Louisiana 44 percent. During the year shipments from Alaska declined 51 percent, Texas 50 percent, Ohio 28 percent, and Washington 16 percent.

A comparison of monthly arrivals shows that receipts were the heaviest during October, totaling 5,992,000 pounds, with December and November receipts closely following. Receipts were least in August, amounting to 3,640,000 pounds. November was the leading month for fresh-water fish with March following and August last. September was the largest month for arrivals of salt-water fish, February next, and January poorest. October was the most important month for shellfish arrivals, with December second and August again last. The greatest shipments of domestic origin were received during October, while imported fishery products arrived in heaviest quantities during February.

From an analysis of the summary it appears that the trend of receipts is upward from most producing areas and for most classifications of fishery products.

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FREEZING AND COLD STORAGE OF SALMON AND "SOLE" FILLETS

By Maurice E. Stansby, Fishery Technologist
Division of Fishery Industries

U. S. Fish and Wildlife Service

During recent years there has been a tremendous expansion in the production of frozen fillets of such Atlantic Coast fish as haddock, cod, and particularly rosefish (also known as ocean, sea, or red perch). On the Pacific Coast no corresponding increase has taken place. While its lack may be explained from an economic viewpoint, some of the difficulty

has been due to technological factors which have prevented the successful storage of fillets cut from certain species of Pacific Coast fish.

The Fish and Wildlife Service's technological laboratory at Seattle, Wash., has recently completed a preliminary survey of some of these difficulties, learning their nature, and determining the effect upon them of certain freezing methods and storage conditions. The following is a brief description of the work which has been taken from the main report.

Fresh fish were obtained at the Seattle wholesale markets, the fish filleted by skilled cutters and packaged both in the manner ordinarily used commercially and by certain modified methods. The fillets were then frozen, stored, and periodic examinations made for alterations in appearance, drip, rancidity, and in the flavor of the cooked fish.

Pink salmon, silver salmon, chum salmon, and cape "sole" (*Eopsetta jordani*) were chosen for the tests, these fish being the most suitable, from the viewpoint of price and availability, for freezing in this region. A portion of the fillets were dipped for 20 seconds in a 15 percent (60°) brine solution. Some of the fillets were quick frozen in a plate-type freezer, and some in an ordinary sharp freezer; storage was carried out at +10° F. and at -5° F.

Alteration in color was of minor importance in the case of "sole", although a distinct yellowing was perceptible after six months' storage. Drastic changes in color were encountered in the case of certain species of salmon. Pink salmon was affected the most; after two months the normal pink had been largely obscured by the formation of a gray color at the surface, and after further storage this color had deepened to a yellow brown. Chum salmon showed little change in color after four months' storage, but after six months was quite badly discolored. Silver salmon developed very little alteration of color even after six months of storage. The changes in color were noticeable in the unthawed fillets but were much more pronounced after the fish had been cooked.

Changes in flavor eventually occurred with all species. The first change noted was a loss of the normally occurring flavors, the flavor becoming flat and tasteless. This condition was followed and often obscured by the development of off-flavors. The "sole" fillets, after storage of about four months, developed a salt-fish flavor which became fairly pronounced after six months' storage. The pink salmon were rancid after only two months' storage, and certain other off-flavors formed simultaneously. Upon subsequent storage, an extremely bitter, rancid flavor developed and the samples became inedible. The silver salmon fillets had only slight off-flavors after six months' storage, the bulk of the flesh being essentially unchanged after this period of time except for a small amount of rancid oil in the layer of flesh just beneath the skin. Chum salmon remained relatively fresh for four months but after six months were fairly rancid.

The texture of the frozen samples became less firm when thawed and considerable drip exuded, this being particularly true after extended storage. The change in texture was much more pronounced for the "sole" than for any of the salmon fillets. Thus, drip in the unbrined, slow frozen "sole" fillets, after six months' storage at +10° F., was 9.4 percent. Similarly treated pink salmon had 5.5 percent drip, silver salmon 4.4 percent drip, and chum salmon 4.3 percent drip.

Use of a brine treatment preliminary to freezing reduced drip markedly in the case of "sole". For example, quick frozen, brined "sole" fillets held for four months at -5° F. had only 1.3 percent drip compared with 4.2 percent drip for the unbrined fillets. The brine treatment had a considerably less, though still definitely favorable action in reducing drip in the frozen salmon fillets.

The brine treatment had the unfavorable action of accelerating the development of off-flavors. The salt-fish flavor in "sole" was somewhat more marked in the brined samples although the difference was not extreme. The brine treatment also definitely increased the formation of rancidity in the salmon samples. In measuring the development of rancidity, the peroxide number was used as a numerical index. Thus, in the case of chum salmon held for six months at +10° F., the brined samples had a peroxide number of 18.7 compared with 11.3 for the unbrined fish, and the latter samples were considerably less rancid.

The fillets stored at -5° F. were better in all respects than those stored at $+10^{\circ}$ F., drip being less, appearance better, and off-flavor development considerably less. For example, the peroxide value for brined chum salmon stored for six months at $+10^{\circ}$ F. was 18.7 compared with 9.4 for the fillets held at -5° F., and the latter were only slightly rancid while the former were extremely rancid.

Quick freezing reduced drip in the freshly frozen samples. Upon subsequent storage the difference between quick and slow frozen fillets diminished and, especially in the case of the samples stored at $+10^{\circ}$ F., there was very little if any difference between quick and slow frozen fish after six months' time. The beneficial effect of quick freezing was considerably more pronounced in the case of "sole" than was the case with the salmon fillets.

Satisfactory storage of fillets was attained only when the fish were adequately protected against desiccation and oxidation by means of suitable moisture-vapor proof wrappers. Not only was it necessary that a suitable wrapping material be used, but the method of wrapping was of extreme importance. If any appreciable amount of air space was left within the package, not only did considerable oxidation take place, but also some desiccation occurred and frost collected within the package. Where the wrapper adhered closely to the fish without leaving any air pockets, a minimum of difficulty with rancidity, discoloration, and desiccation was encountered.

Fillets frozen in blocks and protected by a thick ice glaze were afforded ample protection so long as the ice glaze remained intact.

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CHANGE IN SHELLFISH REGULATIONS

The U. S. Public Health Service in Washington, on January 15, 1941, announced the Amendment of Minimum Requirements for Endorsement of State Shellfish Control Measures and Certification for Shippers in Interstate Commerce so that section III 4(b) now reads as follows:

"Shucked oysters and clams shall be packed and shipped in approved containers sealed in such manner that tampering is easily discernible, and marked with packer's certificate number impressed or embossed on the side of such container and preceded by the State abbreviation. When containers are sealed with covers which become an integral part of the container and which will ordinarily be removed only by the ultimate consumer, the identification letter and number may be impressed in or permanently embossed, lithographed, or printed on the cover instead of on the side of the can. The date when such containers are filled shall be impressed in the cover by the packer, either in code or uncoded. If the date is in code, a key to the code shall be supplied the State health department in the State in which the shellfish are packed and to the Surgeon General of the U. S. Public Health Service. Shipments shall be so tagged or labeled as to show the name and address of the consignee, the name and address of the shipper, the name of the State of origin, and the certificate number of the shipper."

INTEREST IN LIVERS CONTINUES

All livers and spawn landed at the Boston Fish Pier are now sold through the New England Fish Exchange to the highest bidder. This regulation has been in effect since January 1, according to the Boston Fishery Market News office. On Wednesday, January 22, cod livers brought 4.95 - 5.1 cents per pound. During most of February the price was around 4 cents.

Dogfish and soupfin shark livers are in good demand in Seattle, according to the local Fishery Market News office. Five firms are in the market for the livers, paying $7\frac{1}{2}$ cents per pound for dogfish and 65 to 75 cents per pound for soupfin shark livers.

CANADIAN FISHERIES DEPARTMENT AND UNIVERSITY PROMOTE FISHERMEN'S COOPERATIVES

According to Commercial Fishermen's Weekly, the extension department of the University of British Columbia is commencing its second year of an educational campaign on the cooperative movement. Three field workers have been sent out to discuss the principles of the movement with fishermen along the entire coast. The Dominion fisheries department, sponsor of the campaign, has made funds available.

WHOLESALE AND RETAIL PRICES

For the week ended January 25, 1941, wholesale prices were 80.8 percent of the 1926 average, the highest since January 1938, according to the index of about 900 wholesale price series as compiled by the Bureau of Labor Statistics. The average wholesale price for all commodity groups advanced 0.2 percent over the previous week and 2.1 percent over that of January 27, 1940. Price indices on food costs indicated a steady increase throughout the month of January 1941, and on the 25th of that month food prices were placed at 74.1 percent of the prevailing average during the base year 1926. In the latter part of January 1940 wholesale food prices were only 71.4 percent of the 1926 average.

Retail costs of food advanced between mid-November and mid-December in all of the 51 large cities included in the index and were higher than for the same period of the previous year in nearly all instances. Notwithstanding these recent increases, the prices to the consumer were yet about 3 percent under the 1935-39 average. On December 17, 1940, the average retail cost of all foods was 97.2 percent of the 1935-39 average as compared with 94.9 percent on the approximate date the previous year.

Fresh and frozen fishery products retailed in mid-December 1940 at 4.6 percent above the average price in December of the previous year. One-pound cans of pink salmon selling at 15.7 cents each had not risen in cost during the 3-month period ended with December; however, that price was 6.8 percent higher than in December 1939. The average retail price of a one-pound tin of red salmon was 26.1 cents or 0.1 of a cent more than in mid-November.

NEW ENGLAND VESSEL LANDINGS INCREASE IN VALUE

A total of 30,315,000 pounds of fishery products, valued at \$979,000, was landed by fishing vessels of 5 net tons and over at Boston and Gloucester, Mass., and Portland, Maine, during December 1940, according to Statistical Bulletin No. 1409 issued by the Fish and Wildlife Service. This represents a decline of 3 percent in volume but an increase of 21 percent in value as compared with the same month in 1939. Prices of all important items except gray sole, yellowtail, blackback, and dab were above those of the previous year.

Vessel landings at the three ports during the 12 months of 1940 totaled 372,432,000 pounds, valued at \$10,765,000. This was 16,389,000 pounds below the receipts from these craft in 1939 but a gain of \$1,218,000 in value.

The principal items landed at the three ports during 1940 were as follows: Haddock, 120,457,000 pounds, valued at \$4,472,000; rosefish, 83,781,000 pounds, valued at \$1,257,000; cod, 61,411,000 pounds, valued at \$2,107,000; pollock, 32,040,000 pounds, valued at \$677,000; and mackerel, 20,726,000 pounds, valued at \$416,000.

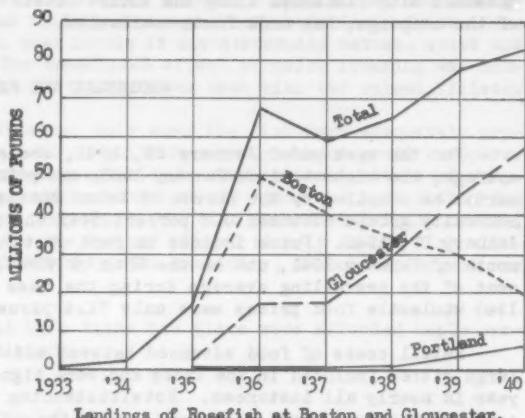
ROSEFISH LANDINGS REACH NEW HIGH

In the short period of only eight years, the catch of rosefish has risen from a position of 130th to about 13th place with respect to the volume of individual fishery products landed in the United States and Alaska.

Prior to 1933 this species was of only slight economic importance, and although large quantities of the fish were taken by New England trawlers operating for groundfish, they were usually discarded. Those brought to port were utilized principally in dressing show windows. In 1932 the total catch was only 132,000 pounds, valued at \$2,000. Eight years later, in 1940, the catch reached nearly 84,000,000 pounds, valued at over \$1,250,000.

The phenomenal increase in the landings of rosefish was due to the development of a market for rosefish fillets, which were sold as fillets of "ocean perch", "sea perch", and "red perch". The rapid growth of the fishery is indicated by the accompanying graph which shows how, in the period of only 3 years, the catch increased from 264,000 pounds to nearly 67,000,000 pounds.

The entire domestic catch of rosefish is taken off the New England States by otter trawls, and is landed almost exclusively at the ports of Boston, and Gloucester, Mass., and Portland, Maine. An interesting development of the fishery has been the decline in volume of the landings at Boston, which fell from 49,400,000 pounds in 1936 to less than 20,000,000 pounds in 1940. While the Boston landings declined, there was a corresponding increase in the receipts at Gloucester, which amounted to over 57,000,000 pounds during the past year. Receipts at Portland, Maine, have grown steadily and reached a total of 6,657,000 pounds in 1940. The trend in the landings at the three New England ports is likewise shown in the accompanying graph.



Landings of Rosefish at Boston and Gloucester, Mass., and Portland, Maine, 1933-40, inclusive

FISHERIES OF MAINE

According to preliminary data received from the Maine Sea and Shore Fisheries at Boothbay Harbor, the total value to the fishermen of the fishery products landed in that State during 1940 amounted to slightly over \$3,000,000. First in value was the lobster catch of 7,643,000 pounds, valued at \$1,237,000. Following in importance were rosefish, 7,892,000 pounds; haddock, 7,439,000 pounds; and whiting, 5,420,000 pounds. It is of interest that nearly ten million blood and sand worms valued at over \$71,000 were produced for bait purposes.

FISHERIES OF MASSACHUSETTS

Landings of fishery products by vessels at the port of Gloucester reached the high figure of over 96,000,000 pounds during 1940. Landings of rosefish alone accounted for approximately 57,000,000 pounds of the total deliveries. According to the Service's agent in that port, prices for rosefish throughout the year remained relatively steady with no repetition of the disastrous glut which occurred in 1939 and which forced prices to an unusually low level. With more efficient methods of handling rosefish, the production of fillets has greatly increased. It has been estimated that Gloucester firms could fillet and package about a half million pounds of rosefish per day, should all of the plants operate simultaneously. Soft clam producers and wholesalers throughout Essex County reported during January that clams were scarce and the demand, although not so brisk as earlier in the winter, was still heavy. Many diggers report a large amount of seed clams in most areas.

BOSTON FISH PIER LANDINGS DROP IN DECEMBER

Offshore and inshore fishing craft delivered to the Boston Fish Pier during December 1940, 21,180,000 pounds of fishery products which brought the fishermen an average of \$3.76 per hundred pounds. Landings during December were 4 percent below those of November 1940; how-

ever, December prices were 15 percent higher than the month earlier. The December receipts brought the total 1940 landings to 250,945,000 pounds as compared with 274,983,000 pounds landed at the pier in 1939. All of the decline was attributed to the smaller offshore catches as inshore craft landed slightly greater quantities of fish in 1940 than in 1939. Complete statistics on the December 1940 receipts and prices at the Boston Pier as compared with earlier periods follow:

Landings and Prices of Fishery Products at Boston

Item	Change from							
	December 1940		Nov. 1940		Dec. 1939		Landings	
	Landings	Av. price (cwt)	Landings	Av. price	Landings	Av. price	12 months 1940	12 months 1939
	Lbs.	\$	Lbs.	\$	Lbs.	\$	Lbs.	Lbs.
Offshore vessels	18,633,000	3.86	0	+15	- 7	+32	218,543,000	243,762,000
Inshore craft	2,547,000	3.03	-26	+ 4	+31	+ 9	32,402,000	31,221,000
Total	21,180,000	3.76	- 4	+15	- 4	+29	250,945,000	274,983,000
Leading items:								
Offshore								
Cod, large	1,691,000	4.56	-13	+27	- 9	+60	21,945,000	23,692,000
Cod, market	2,749,000	3.80	-45	+28	+ 4	+41	26,762,000	35,897,000
Yellowtails	375,000	1.94	+39	- 3	+103	- 6	1,507,000	(1)
Haddock, large	4,053,000	5.36	+36	+ 4	-22	+43	70,389,000	73,278,000
Haddock, scrod	1,848,000	3.88	+ 9	+ 8	-35	+45	34,055,000	43,380,000
Pollock	3,826,000	2.11	+17	+ 9	+ 3	+29	15,441,000	15,818,000
Rosefish	2,239,000	2.24	+41	+14	+31	+33	15,489,000	19,514,000
Inshore								
Cod, large	108,000	5.77	+20	0	-14	+56	1,435,000	1,215,000
Cod, market	354,000	4.16	+97	+ 7	+35	+34	2,173,000	1,561,000
Gray sole	45,000	5.25	+73	-21	-41	-12	1,794,000	(1)
Yellowtails	288,000	1.73	+66	-22	+64	-20	2,755,000	(1)
Haddock, large	158,000	7.03	-57	+14	+ 1	+35	3,412,000	2,607,000
Haddock, scrod	49,000	4.69	-51	+ 8	-51	+55	1,495,000	1,787,000
Hake	18,000	5.17	-90	+28	-82	+53	1,154,000	2,572,000
Pollock	1,334,000	2.11	-30	+ 5	+83	+20	3,852,000	2,518,000

1/ Data not available.

LARGE QUANTITY OF CONCHS RECEIVED IN THE NEW YORK MARKET

Between 15,000 and 20,000 bushels of conchs which are taken from Long Island and adjacent New Jersey waters enter the New York market annually. The meat of this spiral mollusk is utilized in two ways. It is used chiefly by Italian populations as food and also in some instances by fishermen as a trawl line bait. Several Italian restaurants in New York City list conchs regularly on their menus and claim to have a good demand for the shellfish. Conchs in the New York area are commonly taken by three separate methods: They are caught by otter trawlers when primarily dragging for groundfish; they are collected in considerable quantities by oyster dredges dredging for seed oysters; and they are also trapped in conch pots. Many of the small dredge boats operate along the inside bays of Long Island expressly for conchs during several weeks of the year. The conch pot is a home-made apparatus similar to a lobster pot except that the entrance, which consists of a movable trap door centered on an axis in the middle of the door, is located on top of the pot. The conchs crawl up the sloping sides of the pot and upon reaching the trap door fall into the pot. Most pots are made of wooden lathes and require no bait. To keep the pots submerged, two sand bags are ordinarily lashed on the inside. Since at certain times the conchs seem to move along the bottom of the bays rather actively, good catches in this type of apparatus are not infrequent.

FISHERIES OF VIRGINIA

According to the Virginia Commission of Fisheries, a portion of the winter trawl fleet from the vicinity of Gloucester, Mass., had made its appearance in the Hampton Roads, Va., area in the latter part of January. Other vessels are expected to arrive within the next few weeks to trawl off the Virginia coast. These trawlers from New England ordinarily arrive in the Virginia waters prior to that time of year, but it has been reported that because of the mild northern winter it has been unnecessary for them to travel south as early as usual. During the last week of January, 4 trawlers were operating out of Phoebus, 3 from Hampton, and 3 from Norfolk. The principal catches at that time consisted of croaker.

SALES OF SPONGES AT TARPON SPRINGS, FLORIDA, DECLINE

During 1940 a total of 232,134 pounds of sponges was sold through the Tarpon Springs Sponge Exchange, according to information furnished by that organization. The sponges sold for \$847,210—an average of \$3.65 per pound. This is an increase of \$1.21 per pound as compared with the average unit value of the sponges sold in 1939. The 1940 transactions declined 45 percent in volume but only 18 percent in value as compared with the previous year. The decline in the volume of the sales resulted from a corresponding decrease in the catch which was due to the destruction of a large portion of the stock of sponges by a parasitic disease.

Of the total sponges sold through the Exchange in 1940, 40,664 pounds, valued at \$179,616, were large wool; 48,084 pounds, valued at \$205,032, were medium and small wool; 123,558 pounds, valued at \$441,475, were wool rags; 6,324 pounds, valued at \$8,566, were yellow; and 13,504 pounds, valued at \$12,521, were grass.

The major portion of the catch in 1940 was gathered by the use of diving outfits. Fishermen using these outfits took sponges which sold for \$765,785, while those gathered by the use of sponge hooks sold for \$81,425.

FISHERIES OF MISSISSIPPI

From a preliminary report received from the Service's agent in Mississippi, it is understood that the production of shrimp in 1940 in that State was somewhat below the 1939 yield. It is thought that a labor dispute at the opening of the 1940-41 season which suspended shrimp fishing activities for the first month of the season was primarily responsible for the reduced catch since fishing was not heavy enough in the remainder of the season to compensate for the restricted fishing during the earlier period. Oysters were reported to have been somewhat less abundant than during the previous season, although there was no appreciable change in the average price paid to the fishermen in comparison with the amount received by them in previous seasons. Menhaden were understood to have been exceptionally scarce and also low in oil yield. Because of these conditions, most of the menhaden boats terminated the season early, thereby ending a short and somewhat unsatisfactory season. As to other species of fish, the catches of spotted trout and red and black drum were considerably below those of 1939, while the catches of croakers, white trout, and flounders appeared to have been about the same as in the previous year.

CHICAGO RECEIPTS SHOW SLIGHT GAIN IN DECEMBER

Receipts of fishery products on the Chicago Wholesale Market during December showed an increase of 1 percent as compared with the volume received the previous month. The arrivals included 80 classifications of fishery products. Receipts of 32 fresh-water fish formed 51 percent of the total, 34 fish from salt-water made up 23 percent, and 14 shellfish and miscellaneous items constituted the balance of 26 percent.

While a number of increases occurred in the receipts of various items, the greatest gain during the month appeared in the arrival of sauger. This item increased 229 percent.

Receipts for the year 1940 were well above those for 1939, all arrivals totaling 59,433,000 pounds, an increase of 36 percent. Most of the important items reflected gains, sauger, in particular, with a total of 3,516,000 pounds, showing an increase of 237 percent. Detailed tabulations from the December summary of the Chicago Fishery Market News office follow:

Receipts of Fishery Products at Chicago

Item	December 1940	Dec. 1940 compared with Nov. 1940	Dec. 1940 compared with Dec. 1939	12-months Jan.-Dec.	12-mo. 1940 com- pared with 12-mo. 1939
Classification:					
Fresh-water fish	3,003,000	- 6	+ 49	31,745,000	+18
Salt-water fish	1,388,000	+ 14	+ 33	16,200,000	+30
Shellfish, etc.	1,523,000	+ 7	+ 18	11,488,000	+27
Total receipts	5,914,000	+ 1	+ 36	59,433,000	+23
Leading items:*					
Lake herring	588,000	- 25	+177	3,601,000	+57
Lake trout	389,000	- 48	- 8	6,008,000	+15
Sauger	496,000	+229	+237	3,516,000	0
Yellow perch	292,000	+ 35	- 11	2,953,000	+19
Halibut	593,000	+ 26	+ 36	7,690,000	+14
Oysters, shucked	248,000	+ 7	+ 8	1,292,000	+19
Shrimp	794,000	- 12	- 5	7,522,000	+18
Leading sources:					
Louisiana	687,000	+ 16	+ 5	6,142,000	+44
Wisconsin	700,000	- 34	+ 60	7,788,000	+35
Manitoba	829,000	+229	+226	5,375,000	+ 9
Domestic total	4,377,000	- 3	+ 29	42,202,000	+22
Imported total	1,536,000	+ 16	+ 58	17,230,000	+25
Transported by:					
Truck	2,500,000	+ 2	+ 74	21,296,000	+46
Express	847,000	- 23	- 14	18,629,000	+13
Freight	2,567,000	+ 13	+ 33	19,508,000	+13

* Includes fresh and frozen fish.

FISHERIES OF CALIFORNIA

During the month of December all of the fisheries in California were maintained at a fairly high level, according to the Service's agent in that State. It was reported that to produce the record pack of 4,162,000 standard cases of tuna in 1940 the canners utilized about 103,000 tons of all species of tuna, which represented an income of approximately \$11,500,000 to the fishermen of that region. Mackerel canners during the year purchased over 60,000 tons of mackerel from the fishermen at an aggregate value of \$1,260,000. The production of sardines for all purposes--for reduction and canning--amounted to about 450,000 tons, valued at \$4,750,000. It is pointed out that the pack of the three principal California food fishes, namely, sardines, mackerel, and tuna, amounted to approximately 150,000 tons as computed in terms of the net contents of fish in the cans. To the fishermen supplying the raw products to these three major industries there was a gross income of \$17,500,000, which made a gross share of somewhat over \$2,000 per man in these fisheries.

QUARTERLY MARINE-ANIMAL OIL TRADE

Marine-animal Oil Production and Imports Decline

A preliminary report released by the Bureau of the Census indicates that 91,722,000 pounds of marine-animal oils were produced in the United States and Alaska during the fourth quarter of 1940. This is a decline of over one-fourth as compared with the same period in 1939. Reduced production of sardine oil on the Pacific Coast and menhaden oil on the Eastern

Seaboard accounted for the major portion of the decline. A marked gain was shown in the yield of cod and cod-liver oil which increased from 990,000 pounds in the fourth quarter of 1939 to 4,041,000 pounds in the same quarter of 1940.

Imports of marine-animal oils during the last three months of 1940 were less than one-half the quantity received during the same period in 1939. Reduced receipts of cod and cod-liver oil and whale oil, as a result of the European conflict, accounted for the decline. Imports of cod oil were 69 percent less than those in the fourth quarter of 1939, while cod-liver and whale oil imports declined 51 percent and 93 percent, respectively. As a result of the reduced imports of cod and cod-liver oils during 1940, factory and warehouse stocks of these oils amounting to 13,801,000 pounds on December 31, 1940, were 59 percent less than those on the same date in 1939.

Marine-animal Oils Imported for Consumption

Oil	4th quarter	4th quarter
	1940	1939
	Pounds	Pounds
Cod oil	1,226,153	3,967,545
Cod-liver oil	4,566,810	9,328,260
Other fish oils	411,885	396,158
Whale oils	50,400	728,835
Total	6,255,248	14,420,798

Note.--Oils "Entered for warehouse" and not yet withdrawn are not included. During the fourth quarter of 1940 exports of domestic fish oil amounted to 247,987 pounds as compared with 839,374 pounds during the same quarter in 1939.

Statements containing data on the fourth quarter production, consumption, stocks, and foreign trade in marine-animal oils for the past two years follow:

Production, Consumption, and Stocks of Marine-animal Oils

Oil	Factory operation for the quarter ending December 31		Factory and warehouse stocks, December 31
	Production	Consumption	
<u>1940</u>			
Cod and cod-liver oils	4,041,000	6,025,000	13,801,000
Other fish oils 1/	87,681,000	42,287,000	132,455,000
Whale oils	--	3,506,000	53,202,000
Total	91,722,000	51,818,000	199,458,000
<u>1939</u>			
Cod and cod-liver oils	990,000	4,803,000	33,653,000
Other fish oils 2/	126,057,000	61,093,000	167,001,000
Whale oils	194,000	14,130,000	44,496,000
Total	127,241,000	80,026,000	245,150,000

1/ Includes herring oil, 2,149,000 pounds; sardine oil, 75,886,000 pounds; and menhaden oil, 6,725,000 pounds.

2/ Includes herring oil, 792,000 pounds; sardine oil, 108,981,000 pounds; and menhaden oil, 14,271,000 pounds.

Note.--Figures on the production of marine-animal oils for 1939 have been revised in accordance with further reports received since original publication of the data.

FROZEN FISH TRADE

Holdings of Frozen Fishery Products Show Seasonal Decline

Stocks of frozen fish and shellfish held by domestic cold-storage firms declined 13,470,000 pounds during the month ended January 15. On this date holdings totaled 86,618,000 pounds--13 percent less than the poundage in storage on the same date the previous month but 10 percent above the holdings on January 15, 1940. Stocks of all leading items except pollock and rosefish fillets and lake herring and chubs declined during the month. The January 15 holdings of several items were considerably higher than on the same date in 1940; these were halibut, up 45 percent; salmon, 58 percent; whitefish, 28 percent; and shrimp, 63 percent.

Holdings of Fishery Products in United States Cold-storage Plants 1/

Item	Jan. 15 compared with							
	Jan. 15		Dec. 15		Jan. 15		5-yr. av.	
	1941	1940	1940	1940	Jan. 15	1940	Jan. 15	Jan. 15
	Pounds	Percent	Percent	Percent	Percent	Pounds	Pounds	Pounds
Frozen fish and shellfish:								
Total holdings	86,618,000	-13	+10	+14	100,088,000	78,563,000	76,079,000	
Important items:								
Fillets:								
Cod	2,612,000	-13	+16	(2)	3,001,000	2,261,000	(2)	
Haddock	5,052,000	-21	+7	-4	6,399,000	4,727,000	5,240,000	
Pollock	6,120,000	+17	+14	(2)	5,211,000	5,374,000	(2)	
Rosefish	1,420,000	+4	-56	(2)	1,370,000	3,237,000	(2)	
Halibut	7,523,000	-30	+45	+18	10,794,000	5,177,000	6,401,000	
Mackerel	6,132,000	-22	+16	+34	7,880,000	5,270,000	4,565,000	
Sablefish	2,416,000	-19	+10	+23	2,965,000	2,191,000	1,958,000	
Salmon	9,376,000	-15	+58	+8	11,074,000	5,923,000	8,664,000	
Whiting	8,659,000	-10	+15	+4	9,633,000	7,526,000	8,355,000	
Lake herring and chubs	2,968,000	+7	+2	+44	2,765,000	2,922,000	2,064,000	
Whitefish	2,053,000	-12	+28	+67	2,305,000	1,586,000	1,221,000	
Shrimp	5,709,000	-23	+63	(2)	7,422,000	3,507,000	(2)	
Cured fish:								
Herring, cured	16,608,000	-19	+14	+21	20,527,000	14,532,000	13,777,000	
Salmon, mild- cured	4,116,000	-14	-39	-30	4,782,000	6,787,000	5,847,000	

1/ Statistics furnished by the Agricultural Marketing Service, Department of Agriculture.

2/ Data not available.

Groundfish Fillets Lead in Freezing of Fishery Products

A total of 8,080,000 pounds of fish and shellfish were frozen during the month ended January 15, 1941--a decrease of 50 percent as compared with the previous month. Freezing of three species of groundfish fillets--haddock, pollock, and rosefish--accounted for 39 percent of the poundage frozen during the month.

Fishery Products Frozen in United States Cold-storage Plants 1/
(Figures are for the month ending on date indicated)

Item	Jan. 15 compared with							
	Jan. 15		Dec. 15		Jan. 15		5-yr. av.	
	1941	1940	1940	1940	Jan. 15	1940	Jan. 15	Jan. 15
	Pounds	Percent	Percent	Percent	Pounds	Pounds	Pounds	Pounds
Total products	8,080,000	-50	-9	+7	16,316,000	8,849,000	7,540,000	
Important items:								
Haddock fillets	450,000	+24	-33	-43	362,000	667,000	790,000	
Pollock fillets	1,318,000	-65	-11	(2)	3,737,000	1,487,000	(2)	
Rosefish fillets	1,398,000	+1	+11	(2)	1,391,000	1,261,000	(2)	

Fishery Products Frozen in United States Cold-storage Plants (continued) 1/
 (Figures are for the month ending on date indicated)

Item	Jan. 15 compared with					Dec. 15 1940	Jan. 15 1940	5-yr. av. Jan. 15	Jan. 15 1940	5-yr. av. Jan. 15
	Pounds	Percent	Percent	Percent	Pounds					
Important items(continued):										
Smelts	295,000	+132	+195	+130		127,000	100,000	128,000		
Lake herring and chubs	406,000	- 77	+ 47	+ 39		1,768,000	276,000	293,000		
Shrimp	476,000	- 75	- 32	(2)		1,939,000	703,000	(2)		

1/ Statistics furnished by the Agricultural Marketing Service, Department of Agriculture.
2/ Data not available.

Boston Cold-storage Holdings Drop 23 Percent during January

Boston cold-storage establishments reported 13,049,000 pounds of frozen fishery products in storage on January 29, 1941, a decline of 23 percent as compared with the holdings on December 31, 1940, but an increase of 21 percent over the January 31, 1940, figure. The items held in the greatest quantities were pollock fillets, mackerel, cod fillets, and dressed whiting. During January, stocks of all of these items showed a decrease varying from 17 percent to 45 percent. Stocks of halibut, Japanese swordfish, and smelt increased. The following table taken from the records of the Fishery Market News Service indicates the holdings in Boston on January 29, comparing these figures with the inventories of earlier dates.

Boston Cold-storage Holdings

Item	Jan. 29, 1941	Jan. 29 compared with		Dec. 31, 1940	Jan. 31, 1940
		Dec. 31, 1940	Jan. 31, 1940		
Total fish and shellfish	13,049,000	-23	+ 21	16,895,000	10,753,000
Leading items:					
Cod fillets	1,102,000	-33	+ 28	1,649,000	860,000
Pollock fillets	2,908,000	-17	+ 13	3,483,000	2,567,000
Rosefish fillets	136,000	-45	- 75	247,000	551,000
Halibut	146,000	+26	+ 60	116,000	91,000
Mackerel	2,274,000	-26	+ 18	3,092,000	1,935,000
Smelt	541,000	+73	+333	313,000	125,000
Swordfish (Jap.)	70,000	+32	- 55	53,000	154,000
Swordfish (Native)	147,000	-28	+819	203,000	16,000
Whiting, dressed	1,032,000	-27	+ 39	1,407,000	745,000*
Whitefish	22,000	- 4	- 59	23,000	54,000
Scallops	357,000	-25	+ 58	475,000	226,000
Shrimp	293,000	-15	+344	345,000	66,000

* Includes round and dressed.

New York Holdings of Smelt Increase

New York cold-storage holdings on January 30 amounted to 8,744,000 pounds. This represents a decrease of 14 percent below the holdings on December 26 and a 4 percent increase from the February 1, 1940, figure. Important items contributing most to the decline during the month were sea herring and sardines, mackerel, whitefish, and scallops. Appreciable gains were recorded for the year by most varieties, except butterfish, shad, and sturgeon.

Smelt holdings, totaling 504,000 pounds, showed the greatest gain, increasing 95 percent over the previous month and 243 percent above the holdings of a year ago.

Changes in the holdings of all important varieties, as compiled from Fishery Market News Service records in New York, are shown in the following tabulation:

New York Cold-storage Holdings

Item	Jan. 30, 1941	Jan. 30 compared with		Dec. 26, 1940	Feb. 1, 1940
		Dec. 26, 1940	Feb. 1, 1940		
Total fish and shellfish	8,744,000	-14	+ 4	10,164,000	8,430,000
Leading items:					
Butterfish	297,000	-19	- 43	365,000	525,000
Halibut	240,000	- 6	+204	254,000	79,000
Herring, sea and sardine	270,000	-22	+116	347,000	125,000
King salmon	741,000	-14	+145	862,000	303,000
Mackerel	651,000	-29	+ 58	919,000	411,000
Sablefish	256,000	-13	+ 65	293,000	155,000
Shad	241,000	+ 9	- 49	221,000	475,000
Smelt	504,000	+95	+243	259,000	147,000
Sturgeon	507,000	- 7	- 42	544,000	877,000
Whitefish	1,428,000	-20	+ 84	1,767,000	778,000
Lobster tails, spiny	291,000	- 4	0	302,000	292,000
Scallops	331,000	-25	+ 22	441,000	271,000
Shrimp	878,000	-11	+ 65	988,000	533,000

Chicago Cold-storage Holdings Decline during January

Chicago cold-storage holdings of frozen fishery products on January 30, 1941, showed a decline of 6 percent as compared with the holdings on the last Thursday of the previous month and an increase of 1 percent compared with the same period a year ago. Although the holdings of most varieties dropped during the month, considerable increases were noted in the holdings of blue pike and sauger, rosefish fillets, and spiny lobster tails. As compared with a year ago, the current stocks were generally greater with the exception of blue pike and sauger and rosefish fillets. These holdings have decreased 51 percent and 61 percent, respectively. The following table prepared from records of the Fishery Market News Service in Chicago lists cold-storage holdings in more detail:

Chicago Cold-storage Holdings

Item	Jan. 30, 1941	Jan. 30 compared with		Dec. 26, 1940	Feb. 1, 1940
		Dec. 26, 1940	Feb. 1, 1940		
Total fish and shellfish	5,350,000	- 6	+ 1	5,672,000	5,274,000
Leading items:					
Blue pike and sauger	223,000	+65	- 51	135,000	459,000
Lake herring and chubs	695,000	- 7	+ 31	748,000	531,000
Lake trout	524,000	-21	- 38	666,000	839,000
Smelt	129,000	-22	+215	165,000	41,000
Whitefish	259,000	+ 5	- 21	247,000	327,000
Yellow perch	126,000	+18	- 30	107,000	180,000
Cod fillets	153,000	-11	+ 89	171,000	81,000
Haddock fillets	112,000	- 7	- 12	121,000	127,000

Chicago Cold-storage Holdings (continued)

Item	Jan. 30, 1941	Jan. 30 compared with		Dec. 26, 1940	Feb. 1, 1940
		Dec. 26, 1940	Feb. 1, 1940		
	Pounds	Percent	Percent	Pounds	Pounds
Leading items (continued):					
Halibut	506,000	-15	+95	593,000	260,000
Rosefish fillets	108,000	+44	-61	75,000	276,000
Shrimp	850,000	-15	+47	1,003,000	560,000
Spiny lobster tails	120,000	+33	+88	90,000	64,000

Canadian Holdings of Salmon Show Increase

Canadian cold-storage plants held 31,563,000 pounds of fresh frozen fish and shellfish on January 1, according to preliminary figures released by the Dominion Bureau of Statistics. This is a decline of 5,345,000 pounds as compared with the holdings on December 1, but 2,505,000 pounds more than was held on January 1 last year. The principal items held were salmon, 9,574,000 pounds; sea herring, 6,434,000 pounds; halibut, 3,698,000 pounds; and mackerel, 1,634,000 pounds. These four items accounted for 68 percent of the total holdings. January 1 stocks of salmon were 83 percent greater than those on the same date in 1940 while sea herring and halibut showed increases of 13 percent and 48 percent, respectively. Holdings of mackerel were 47 percent below those of a year ago, while stocks of whitefish amounting to 560,000 pounds were 72 percent under the poundage in storage on January 1, 1940.

Cold-storage holdings of frozen smoked fish in Canadian plants amounted to 1,846,000 pounds on January 1--a decline of 17 percent as compared with the previous month and 23 percent less than the poundage in storage on January 1, 1940. Stocks of groundfish fillets and sea herring kippers accounted for 39 and 37 percent of the total, respectively.

Preliminary figures show that 2,441,000 pounds of fresh fish and shellfish were frozen by Canadian freezers during December as compared with 1,249,000 pounds in the same month the previous year. The principal items frozen were sea herring, 549,000 pounds; cod fillets, 581,000 pounds; and whole cod, 153,000 pounds. During the month, 599,000 pounds of smoked fish were also frozen--a decline of 52 percent as compared with the same month in 1939. Frozen smoked groundfish fillets accounted for 65 percent of the total freezings of smoked fish during December.

CANNED FISH TRADE

Canned Fish is Popular "Super Market" Item

Canned fish was purchased by over 27 percent of 2,000 customers shopping on Friday and Saturday in eleven "super markets" scattered over the United States, according to a survey made by McFadden's Publications, Incorporated. During November 1938 and January and February 1939, canned fish was the tenth most frequent item purchased. Canned vegetables, canned fruit, canned milk, canned soup, coffee, packaged crackers, sugar, packaged soap, and bar soap were more frequently purchased than canned fish. These were the only items purchased more frequently than canned fish, while among the items less frequently found in the shopper's market basket were canned beans, canned fruit juices, tea, dry cereals, and gelatine desserts. The 547 people purchasing canned fish took home 1,136 cans, an average of 2.1 cans of fish per customer.

Canned Salmon Stocks Continue to Dwindle

On the Pacific Coast 84 salmon canning companies which produce about 99 percent of the total salmon pack reported through the Association of Pacific Fisheries that unsold stocks of canned salmon remaining in their possession at the end of 1940 amounted to only 45 per-

cent of those held on the same date the previous year. On December 31, 1940, canned salmon inventories totaled 960,000 standard cases of 48 one-pound tins as compared with 2,141,000 cases on hand on the last day of 1939. During the month of December, supplies were reduced 112,000 cases, with sales of Alaska red salmon, coho salmon, and pink salmon responsible for most of the reduction. Coincidental with the movement of these stocks, price quotations on these species advanced during December. Although holdings of Alaska red salmon and chum salmon were exceptionally low as compared with the previous year, supplies of Puget Sound sockeye salmon and chinook salmon were somewhat higher than on the same date in 1939. A complete statement of unsold stocks follows:

Canned Salmon Unsold -- Standard Cases

<u>Item</u>	<u>December 31, 1940</u>	<u>November 30, 1940</u>	<u>December 31, 1939</u>
Chinook or king	83,000	98,000	52,000
Puget Sound sockeye	38,000	42,000	32,000
Alaska red	226,000	255,000	1,366,000
Silver or coho	173,000	200,000	94,000
Humpback or pink	373,000	407,000	445,000
Chum	58,000	61,000	150,000
Bluebacks and steelheads	9,000	9,000	2,000
Total	960,000	1,072,000	2,141,000

Below are shown the quotations of canned salmon, f.o.b. Pacific Coast shipping points, as reported by Seattle salmon brokers to the Seattle Fishery Market News office on January 10, 1941.

Canned Salmon Quotations

<u>Item</u>	<u>Can size</u>	<u>Quotation Jan. 10, 1941 per doz. cans</u>	<u>Quotation Dec. 1, 1940 per doz. cans</u>
Alaska red	1 lb. tall	\$2.75	\$2.55
Silver or coho	1 lb. tall	1.85 - 2.00	1.85 - 2.00
Chum	1 lb. tall	1.40 - 1.50	1.30 - 1.35
Humpback or pink	1 lb. tall	1.65	1.45 - 1.50
Puget Sound sockeye	1 lb. flat	3.50 - 3.65	3.65

Current Season Canned Shrimp Production Low

Southern shrimp packers operating under the Seafood Inspection Service of the United States Food and Drug Administration reported that their total production of canned shrimp for the current season from July 1, 1940, through February 1, 1941, aggregated 885,000 standard cases of 48 No. 1 cans. This total represents a pack of 177,000 cases less than the amount produced during the same period the previous season. During the month of January only 52,000 cases were canned.

Packers' quotations on canned shrimp pointed to a noticeable advance in wholesale prices during January. Complete quotations on No. 1 tall tins of canned shrimp in ordinary wholesale quantities, f.o.b. point of production, as reported by Gulf packers, follow:

Canned Shrimp Prices -- per doz. tins

	<u>Wet pack</u>		<u>Dry pack</u>	
	<u>Feb. 1, 1941</u>	<u>Jan. 1, 1941</u>	<u>Feb. 1, 1941</u>	<u>Jan. 1, 1941</u>
Small	\$1.10 - 1.20	\$1.05 - 1.15	\$1.10 - 1.20	\$1.05 - 1.15
Medium	1.20 - 1.35	1.10 - 1.20	1.20 - 1.25	1.10 - 1.20
Large	1.25 - 1.40	1.15 - 1.25	1.25 - 1.30	1.15 - 1.25
Extra large or jumbo	1.30 - 1.50	1.20 - 1.30	1.30 - 1.40	1.20 - 1.30

1940-41 California Sardine Pack Slightly Ahead of Previous Season

The aggregate output of canned California sardines for the 1940-41 season through January totaled 2,695,000 cases as compared with 2,665,000 cases for the same period in the previous season, according to preliminary figures issued by the Division of Fish and Game of the State of California. The pack for the month of January 1941 amounted to 621,000 cases, which represents a slight increase over the 571,000 cases packed during the corresponding month of the previous year. More than 411,000 tons of sardines for utilization by canners and reducers had been received at California ports during the 1941 season through January.

1940 California Tuna Pack Shatters Record; Mackerel Pack also Large

California tuna packers during the calendar year of 1940 produced 4,162,000 standard cases of all species of tuna, according to preliminary data issued by the California Division of Fish and Game. This was the second successive year that the pack of tuna reached record proportions as the 1940 output exceeded the record 1939 production of 3,400,000 cases by 22 percent. Yellowfin tuna was the individual species packed in the greatest quantity since the 2,000,000 cases of canned yellowfin comprised about 50 percent of the total production. Considered by districts, 2,450,000 cases were canned in the San Diego district; 1,708,000 cases in the San Pedro district; and 4,000 cases in the Monterey District.

The total 1940 California mackerel pack was placed at 1,395,000 standard cases of 48 one-pound cans, which represents an increase of 38 percent over the mackerel output in 1939. The 1940 pack was greater than that of any year subsequent to 1935.

British Columbia Canned Herring Pack

A statement contained in the Commercial Fishermen's Weekly, a Pacific Coast trade publication, indicated that the total pack of canned herring in British Columbia for the fall and winter season through January 11 amounted to 557,000 cases. During the period mentioned 66,933 tons of herring were landed in West Coast Canadian ports. In addition to the canned herring, over 7,000 tons of meal and 810,000 gallons of oil were also manufactured.

FOREIGN FISHERY TRADE**Exports of Edible Fishery Products Largest since 1930**

A total of 13,726,000 pounds of edible fishery products was exported from the United States during December, according to data released by the Bureau of Foreign and Domestic Commerce. This was an increase of 80 percent as compared with the previous month and 28 percent more than was exported during December 1939. Increased shipments of canned sardines, which amounted to nearly 9.5 million pounds, were responsible for the major portion of gain. Exports of this item accounted for 69 percent of the edible fishery products shipped to foreign countries during the month.

The United Kingdom continued to be the principal foreign purchaser of this country's edible fishery products, receiving 90 percent of the December exports of canned salmon and 58 percent of those of canned sardines. Other countries receiving large shipments of edible fishery products during December were the Philippine Islands, Cuba, Bolivia, Canada, British Malaya, and Venezuela.

Total exports of edible fishery products during 1940, which amounted to 144,838,000 pounds, were the largest for any year since 1930. Heavy shipments of canned salmon and sardines, which accounted for 86 percent of the total exports of edible fishery products during the year, were responsible for the increase. The following table shows the principal items exported during December 1940 and 1939, as well as the total for both of the past two years.

United States Exports of Edible Fishery Products 1/

Item	December	December	Twelve months ending with December	
	1940	1939	1940	1939
	Pounds	Pounds	Pounds	Pounds
Salmon, canned	2,522,000	2,532,000	56,212,000	40,766,000
Sardines, canned	9,498,000	6,187,000	68,693,000	56,813,000
Shrimp, canned	375,000	238,000	2,497,000	5,939,000
Other products	1,333,000	1,742,000	17,436,000	21,456,000
Total	13,726,000	10,699,000	144,838,000	124,974,000

1/ Data furnished by Bureau of Foreign and Domestic Commerce.

1940 Imports of Edible Fishery Products Show Decline

December imports of edible fishery products amounted to 26,851,000 pounds--a gain of 2 percent as compared with the same month in 1939. The principal items imported during the month were salted groundfish and fresh or frozen fresh-water fish, which each accounted for 25 percent of the total; salted herring, 8 percent; and fresh lobsters, 7 percent. December imports of salted groundfish and fresh or frozen fresh-water fish were both approximately 50 percent greater than in the same month in 1939, while those of fresh and frozen sea herring and tuna, and canned crab meat and sardines showed marked declines.

A total of 302,518,000 pounds of edible fishery products were imported into the United States during 1940--a decrease of 13 percent as compared with the previous year. Reduced shipments of fresh or frozen sea herring and tuna, and canned sardines and tuna accounted for the major portion of the decline. There are listed below figures on the imports of edible fishery products during December of the past two years, as well as the total imports for each of these years.

Imports of Edible Fishery Products into the United States

Item	December	December	Twelve months ending with December	
	1940	1939	1940	1939
	Pounds	Pounds	Pounds	Pounds
Fresh or frozen:				
Fresh-water fish	6,773,000	4,620,000	55,206,000	50,790,000
Halibut	233,000	59,000	4,639,000	5,499,000
Salmon	363,000	317,000	7,099,000	6,548,000
Sea herring	456,000	1,116,000	22,545,000	32,590,000
Smelts	2,189,000	1,245,000	7,314,000	6,858,000
Swordfish & sturgeon	45,000	108,000	3,279,000	4,039,000
Tuna	123,000	1,015,000	7,189,000	14,595,000
Fish filleted, skinned, boned, etc.	1,262,000	1,065,000	15,786,000	15,649,000
Lobsters	1,809,000	1,425,000	17,272,000	15,038,000
Pickled or salted:				
Cod, haddock, hake, etc.	6,811,000	4,514,000	54,551,000	53,918,000
Herring	2,028,000	2,182,000	27,792,000	27,399,000
Canned:				
Crab meat	33,000	1,115,000	11,861,000	13,507,000
Lobsters	127,000	102,000	1,653,000	946,000
Sardines	630,000	1,456,000	12,895,000	31,657,000
Tuna	514,000	591,000	7,678,000	10,126,000
Other, fresh, frozen, salted, canned, etc.	3,455,000	5,321,000	45,759,000	57,081,000
Total	26,851,000	26,251,000	302,518,000	346,240,000

Canadian Fishery Imports in the United States Below Quota

The Canadian Trade Commissioner's office in New York reporting through the Commercial Intelligence Journal states that through November 30, 1940, 9,442,000 pounds of the 15,000,000-pound quota assigned to the importation of filleted groundfish, fresh or frozen, into the United States under the Canadian-United States Trade Agreement of November 17, 1938, had been utilized. The 11-months' total imports of these products represents only 62.9 percent of the entire quota, and unless shipments are extremely heavy during the last month of the year it is thought that the quota will not be reached. The Trade Agreement signed November 17, 1938, reduced the duty of $2\frac{1}{2}$ cents a pound on these products as specified in the 1930 Tariff Act to 1 7/8 cents per pound.

THE COVER PAGE

Fishermen ply their trade summer and winter, and spring and fall in spite of rigorous weather conditions. The cover page illustrates a dragger at the New York fish wharf soon after its arrival from a winter trip on the fishing banks. Ice-laden vessels delivering fish at North Atlantic ports during the winter months are an impressive sight typifying the arduous work of our fishermen. According to the Service's records, about 36,000 fishermen in the United States and Alaska are employed on more than 5,000 vessels, which have an estimated value of over \$70,000,000. These craft widely vary in size, ranging from 5 net tons capacity to about 700 net tons, with the major portion of the total number of vessels falling into the 5-ton to 20-ton classification. In addition to the vessels, there are over 32,000 smaller motorboats of less than 5 net tons engaged in fishing operations.

FISHERY TRADE INDICATORS
(Expressed in Thousands of Pounds)

Item	Month		Latest month	Same month a year ago	Previous month
FRESH FISH LANDINGS					
Boston, Mass.	December	.....	20,751	22,533	21,555
Gloucester, Mass.	do	.....	8,440	7,451	8,751
Portland, Maine.	do	.....	1,124	1,222	1,723
Boston, Gloucester, and Portland:					
Cod.....	do	.....	5,096	5,409	7,387
Haddock.....	do	.....	6,245	8,692	5,031
Pollack.....	do	.....	7,928	7,592	9,760
Rosefish.....	do	.....	7,351	6,280	6,188
FISH RECEIPTS, CHICAGO 1/					
Salt-water fish.....	do	.....	1,388	1,045	1,213
Fresh-water fish.....	do	.....	3,003	2,019	3,195
Shellfish, etc.	do	.....	1,523	1,292	1,429
By truck.....	do	.....	2,500	1,439	2,459
By express.....	do	.....	846	589	1,107
By freight.....	do	.....	2,567	1,928	2,271
COLD-STORAGE HOLDINGS 2/					
New York, N. Y.:					
Salt-water fish.....	January	.....	4,365	4,646	5,054
Fresh-water fish.....	do	.....	2,702	2,560	3,178
Shellfish, etc.	do	.....	1,677	1,776	1,932
Boston, Mass.:					
Salt-water fish.....	do	.....	12,100	9,756	15,680
Fresh-water fish.....	do	.....	55	121	63
Shellfish, etc.	do	.....	895	876	1,152
Chicago, Ill.:					
Salt-water fish.....	do	.....	1,590	1,557	1,694
Fresh-water fish.....	do	.....	2,336	2,810	2,397
Shellfish, etc.	do	.....	1,118	806	1,278
Unclassified.....	do	.....	306	258	304
United States:					
Cod fillets.....	do	.....	2,612	2,261	3,001
Haddock fillets.....	do	.....	5,052	4,727	6,399
Halibut.....	do	.....	7,523	5,177	10,794
Mackerel.....	do	.....	6,132	5,270	7,880
Pollack fillets.....	do	.....	6,120	5,374	5,211
Rosefish fillets.....	do	.....	1,420	3,237	1,370
Salmon.....	do	.....	9,127	5,923	11,074
Whiting.....	do	.....	8,655	7,526	9,633
Shrimp.....	do	.....	5,709	3,507	7,422
New England, all species.....	do	.....	25,624	24,779	28,464
Middle Atlantic, all species.....	do	.....	15,531	15,723	16,279
South Atlantic, all species.....	do	.....	4,178	4,718	5,264
North Central East, all species.....	do	.....	15,477	14,032	15,925
North Central West, all species.....	do	.....	4,358	4,724	4,539
South Central, all species.....	do	.....	3,760	2,446	4,873
Pacific, all species.....	do	.....	17,690	12,553	23,004
FOREIGN FISHERY TRADE 3/					
Exports:					
All edible fishery commodities.....	December	.....	13,726	10,699	7,619
Canned salmon.....	do	.....	2,522	2,532	1,331
Canned sardines.....	do	.....	9,498	6,187	4,965
Canned shrimp.....	do	.....	373	238	157
Imports:					
All edible fishery commodities.....	do	.....	26,851	26,251	28,174
Fresh-water fish and sels, fresh or frozen....	do	.....	6,773	4,620	4,457
Canned tuna.....	do	.....	514	591	589
Canned sardines.....	do	.....	630	1,456	788
Cod, haddock, hake, etc., pickled or salted..	do	.....	6,811	4,514	7,000
Herring, pickled or salted.....	do	.....	2,028	2,182	4,128
Crab meat, sauce, etc.	do	.....	33	1,115	155
Lobsters, not canned.....	do	.....	1,809	1,425	583
Lobsters, canned.....	do	.....	127	102	72

1/ Includes all arrivals as reported by express and rail terminals, and truck receipts as reported by wholesale dealers, including smokers.

2/ Data for individual cities are as of the last Thursday of the month, except those at Boston which are for the last Wednesday of the month, and those for geographical areas and the total of the United States which are as of the 15th of the month.

3/ From data compiled by the Bureau of Foreign and Domestic Commerce.

Note.--Data for the latest month are subject to revision.

FISHERY MARKET NEWS

The information collected and compiled by the various Fishery Market News offices is disseminated both in printed form and by radio.

The printed releases consist of:

1. Daily mimeographed reports.
2. Monthly mimeographed summaries.
3. Periodic rotoprinted reviews. (Fishery Market News)
4. Annual mimeographed summaries.

The radio information consists of Market Broadcasts and Consumer Broadcasts:

1. Each week day - A Market Broadcast condensed from the Market News report is broadcast by a local station.
2. Four times weekly - Consumer Broadcasts suggesting good buys and giving useful information about the purchase or preparation of fish are broadcast by 10 to 20 stations within the area of local distribution.

The information issued by each of the various offices is indicated by an "x" in the following tabulation.

Office & Address	Reports & Summaries			Market Broadcasts*			A.M.	P.M.
	Daily	Monthly	Annual	Station	Frequency	Time		
33A Fulton St., NEW YORK, N. Y.	x	x	x	-	-	-	-	-
253½ Northern Ave., BOSTON, Mass.	x	x	x	WHDH	830	10:30	4:15	
200 N. Jefferson St., CHICAGO, Ill.	x	x	x	WJJD	1130	6:30	1:00	
417 Bell St. Terminal, SEATTLE, Wash.	x	x	x	-	-	-	-	-
309 Duval Bldg., JACKSONVILLE, Fla.	x	-	x	WJAX	900	7:45	-	
1100 Decatur St., NEW ORLEANS, La.	x	x	x	WWL	850	5:10	-	
WASHINGTON, D. C.	-	**	-	-	-	-	-	-

* Consumer Broadcasts are released by all offices.

** Periodic review entitled Fishery Market News.

Requests to be placed upon mailing lists should be addressed to FISH and WILDLIFE SERVICE, FISHERY MARKET NEWS SERVICE. Reports or summaries should be requested from the regional offices and the periodic review from Washington. There is no charge for the publications listed.

